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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,206	11/03/2006	Matthew Aspray	ADR140USA	7063
24339	7590	02/20/2008		
JOEL D. SKINNER, JR. SKINNER AND ASSOCIATES 212 COMMERCIAL ST. HUDSON, WI 54016			EXAMINER NWUGO, OJIAKO K	
			ART UNIT 2612	PAPER NUMBER
			MAIL DATE 02/20/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/575,206

Applicant(s)

ASPRAY, MATTHEW

Examiner

Ojiako Nwugo

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 10 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jean-Pierre Rigal US Patent 6301718 in view of Aldean Burdette Bassette et al US Patent 5713082. (Hereafter referred to as Rigal and Bassette)

Regarding **claim 1**, Rigal discloses in fig. 1, 2 and col. 2 lines 19-23 a helmet with an impact indicator 5. Bassette discloses in fig 2 and col. 4 lines 47-52 in light of col. 3 lines 53-55 a helmet with shock absorbent material.

It would have been obvious for one of ordinary skill in the art at the time of the invention in to include the shock absorbing material of Bassette into Bassette Rigal to protective against impact as taught by Bassette.

Regarding **Claim 11**, Rigal discloses in col. 3 lines 43-46 an impact indicator which changes color when impact exceeds a certain threshold.

Regarding **Claim 12**, Rigal discloses in col. 3 lines 43-46 an impact indicator which changes color when impact exceeds a certain threshold.

Regarding **Claim 13**, Rigal discloses in col. 3 lines 40-46 an impact indicator, a tube with liquid content that changes color when impact exceeds a certain threshold. Tube must be transparent for color change to be visible.

Regarding **Claim 14**, Rigal discloses in col. 3 lines 43-46 an impact indicator which changes color when impact exceeds a certain threshold

Regarding **Claim 15**, Rigal discloses in col. 3 lines 40-46 an impact indicator, a tube with liquid content that changes color when impact exceeds a certain threshold. Tube must be transparent for color change to be visible. The deformation of tube breaks surface that is visibly indicated by color changes.

Regarding **Claim 16**, Rigal discloses in col. 3 lines 40-46 an impact indicator, a tube with liquid content that changes color when impact exceeds a certain threshold. The color changes by the spreading of colored liquid through out the entire volume of the tube.

Claim 2 and 3 are rejected in view of rejected under 35 U.S.C. 103 (a) as being unpatentable over Rigal in view of Chris Kolefas US patents 5883569. (Hereafter referred to as Kolefas)

Regarding **claim 2**, Rigal discloses a helmet with an impact sensor fig. 4 and col. 2 lines 55-60 but it does not discloses an electronic impact sensor. Kolefas discloses in col. 2 lines 21-28 an impact detector 2 which detects impact with change in capacitance. This reads on "comprises an electrical impact sensor".

It would have been obvious for one ordinary skill the time of the invention to incorporate the electrical impact sensor of Kolefas into Rigal to transmit impact response as taught by Kolefas.

Regarding **claim 3**, as treated in **Claim 2** Kolefas detects impact via capacitive variance.

Claim 4 and 5 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Rigal in view of Toru Ueno US patents 6532824. (Hereafter referred to as Ueno)

Regarding **claim 4**, Rigal discloses a helmet with an impact sensor fig. 4 and col. 2 lines 55-60 but it does not discloses an strain-gauge impact sensor. Ueno discloses in col. 4 and lines 30-32 a strain gauge sensor that work by piezo - resistive effect hence a piezoelectric material incorporated.

It would have been obvious for one of ordinary skill at the time of the invention to incorporate the strain-gauge of Ueno in Rigal in order to detect impact of machines.

Regarding **claim 5** as treated in **claim 4** Ueno discloses strain gauge made of piezo-electric material.

Claim 6 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Bassette and Rigal in view of David Lussey US patent application 2004/02522007. (Hereafter referred to as Lussey)

Regarding **claim 6**, Rigal discloses a helmet with an impact sensor fig. 4 Bassette discloses all the limitation of **claim 7** and col. 2 lines 55-60 but it does

not discloses an quantum tunneling impact sensor. Lussey discloses in fig. 1 and paragraph 54 use quantum tunneling to detect pressure or impact.

It would have been obvious for one of ordinary skill in the art at the time of invention to quantum tunneling of Lussey in Rigal to detect pressure as taught by Lussey.

Claim 7-10 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Bassette and Rigal in view of Curtis A. Vock et al US patent 7174277. (Hereafter referred to as Vock)

Regarding **claim 7** Rigal and Bassette discloses all the limitations **claim 7** as applied to **claim 2** except memory to record impact. Vock discloses in col. 52 lines 55-60 in light of col. 9 lines 33-34 an impact sensor incorporated into an MMD which can be installed in a helmet that also records impact event.

It would have been obvious for one of ordinary skill in the art at the time of the invention to include the recording of impact event in Vock into Rigal for purpose of assessing impact effects as taught by Vock.

Regarding **claim 8** Vock discloses in col. 22 lines 24-26 the monitoring of impact by MMD.

Regarding **claim 9**, Vock discloses in col. 6 lines 59-65 the monitoring of impact MMD the periodic monitoring of weight.

Regarding **Claim 10**, Rigal discloses in col. 3 lines 43-46 an impact indicator which changes color when impact exceeds a certain threshold.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ojiako Nwugo whose telephone number is (571) 272 9755. The examiner can normally be reached on M - F 7.30am - 5.00pm EST, Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (571) 272 2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OKN


DAVETTA W. GOINS
PRIMARY EXAMINER